



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,231	10/30/2003	Sandra Helton McCain	2003-0309.01	9151
21972	7590	10/14/2005	EXAMINER	
LEXMARK INTERNATIONAL, INC. INTELLECTUAL PROPERTY LAW DEPARTMENT 740 WEST NEW CIRCLE ROAD BLDG. 082-1 LEXINGTON, KY 40550-0999			SHAH, MANISH S	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/697,231	MCCAIN ET AL.	
	Examiner Manish S. Shah	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 August 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gundlach (# US 5560766) in view of Baettig et al. (# US 6320031).

Gundlach discloses an aqueous ink including an coloring matter a mixture of 0.1 to 3.5 wt.% of Acid Yellow 17 and 0.1 to 4 wt.% of Direct Yellow 132 (column: 3, line: 32-35); a humectant (column: 3, line: 53-60), a penetrant (surfactant) (column: 4, line: 44-50; column: 5, line: 30-40) and water (column: 3, line: 45-51).

Gundlach differ from the claim of the present invention is that the ink having chroma of at least about 108.5.

Baettig et al. teaches to get the high quality printed image, the ink having chroma of about 111.7 (see Table: 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink composition of Gundlach by the aforementioned teaching of Baettig et al. in order to have a high quality printed image.

Art Unit: 2853

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gundlach et al. (# US 5776230) in view of Baettig et al. (# US 6320031).

Gundlach discloses an aqueous ink including an coloring matter a mixture of 0.5 to 8 wt.% of Acid Yellow 17 and 0.5 to 8 wt.% of Direct Yellow 132 (column: 8, line: 35-60); a humectant (non-water component) (column: 7, line: 1-5), a penetrant (column: 7, line: 10-20) and water (column: 6, line: 51-55).

Gundlach differ from the claim of the present invention is that the ink having chroma of at least about 108.5.

Baettig et al. teaches to get the high quality printed image, the ink having chroma of about 111.7 (see Table: 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink composition of Gundlach by the aforementioned teaching of Baettig et al. in order to have a high quality printed image.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gundlach et al. (# US 5788750) in view of Baettig et al. (# US 6320031).

Gundlach discloses an aqueous ink including an coloring matter a mixture of 0.5 to 15 wt.% of Acid Yellow 17 (column: 6, line: 60-65) and 0.5 to 15 wt.% of Direct Yellow 132 (column: 7, line: 1-5, 55-62) in acid form (column: 10, line: 1-20); a humectant (column: 6, line: 35-40), a penetrant (surfactant) (column: 11, line: 50-65 and water (column: 6, line: 19-24).

Gundlach differ from the claim of the present invention is that the ink having chroma of at least about 108.5.

Baettig et al. teaches to get the high quality printed image, the ink having chroma of about 111.7 (see Table: 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink composition of Gundlach by the aforementioned teaching of Baettig et al. in order to have a high quality printed image.

### ***Response to Arguments***

4. Applicant's arguments filed 08/22/2005 have been fully considered but they are not persuasive. Applicant argued that the prior art does not constitute an anticipation of all combinations with the range, which is not persuasive. All the three references are provided the ranges, which cover the applicant's claimed ranges. So It would have been obvious to one having ordinary skill in the art at the time of invention was made to incorporate about 4% of Direct Yellow 132 and from 0.5 to 1% of Acid Yellow 17, since it has been held that it is not inventive to discovering and optimum value or workable ranges by routine experimentation. *In re Aller*, 105 USPQ 233 (CCPA1955). Now it is burden on applicant to provide some kind of comparison study to show why there ranges are critical. However, on page 4 in Applicant specification, it disclose that ink having 4% of Direct Yellow 132 (about 3.72), and 1% of Acid Yellow 17, which covers by all three references.

Applicant argued that dyes of the Baettig are simply different from the two dyes claimed. The structural formulas of the two dyes in the invention are different from dyes of Baettig reference. However applicant didn't claim the structural formula of the two dyes in the claim language. According present claim Baettig dye also reads on the claims. According to present claim language, combination of Gundlach and Baettig reads on the claimed invention. However Baettig teaches that to get the high quality printed image, ink having chroma of about 111.7, this is enough reason to combining the dyes of both the references. To overcome the present rejection applicant has to claim the structural formula of the dyes.

### ***Conclusion***

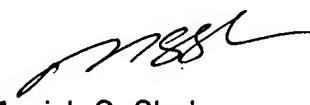
5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Manish S. Shah  
Primary Examiner  
Art Unit 2853

MSS

10/11/09